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MINUTES OF THE EXECUTIVE BOARD MEETING OF THE DIVISION OF OIL, GAS, AND MINING, HELD ON WEDNESDAY, DECEMBER 15, 1976, AT THE DIVISION OFFICES, 1588 WEST NORTH TEMPLE, SALT LAKE CITY, UTAH.

THE FOLLOWING BOARD MEMBERS WERE PRESENT:

Chairman Guy N. Cardon
Charles R. Henderson
Hyrum L. Lee
Robert R. Norman
I. Daniel Stewart

STAFF MEMBERS PRESENT:

Cleon B. Feight - Director
Patrick L. Driscoll - Chief Petroleum Engineer
Ronald W. Daniels - Coordinator of Mined Land Development
Brian W. Buck - Engineering Geologist
Scheree Wilcox - Administrative Assistant
Thalia Busby - Executive Secretary

The December Executive Meeting of the Board of Oil, Gas, and Mining was held in the Division offices, Salt Lake City, Utah on December 15, 1976, at 10:00 a.m., with Chairman Guy N. Cardon presiding.

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KENNECOTT REPRESENTATIVES
INTRODUCED

ACT-035-002

Representatives from the Kennecott Utah Copper Division were present to discuss the proposed reclamation plan for their Bingham Mine operations. Representing Kennecott were Mr. Chuck Stillman and Mr. Bill Southard, who presented some key items relative to the contractual arrangement for their reclamation plan. Said plan is divided into seven geographic areas (see attached sheets).

These items are broken down into specific phases of the total mining operation, and at the present time, Kennecott is spending an annual figure of \$25,000.00 for basic reclamation purposes. This figure is their proposed amount used in the standard form presented to the Board for the Bingham Mine operation.

After the Board's review of their plan, it appeared that the \$25,000.00 figure may not be suitable surety to cover the next fifty (50) years of operation. This figure was derived from their present reclamation expenses. At the present time, the elevation in the pit area is 5,200' and it would be uneconomical to open pit mine above 6,100'. Therefore, open pit mining operations could be concurrent with underground mining before too long. The Board was also informed that they are monitoring the waste dumps for stability at a cost of \$6,000 per year, but this is an operational cost and not taken in consideration with the reclamation figure. With respect to "dust type" air pollution, a pipeline will be installed to run waste water to wet these problem areas.

Mr. Stillman also gave some facts about the waste material. Said material contains about seven parts per million of uranium and it may be economically feasible to extract the uranium. It was also noted that ninety percent (90%) of the total dump surface area will be developed for leaching purposes. After much discussion on the estimated amounts for the ultimate reclamation figure, it was decided that the annual figure of \$25,000.00 would not be sufficient because the ultimate figure for the life of the mine is only estimated at \$2,600,000.00 in 1976 dollars. Chairman Cardon was of the opinion that at this time, a specific amount could not be agreed upon. Board member Stewart also stated that it would be well to work out something with flexibility rather than establish a fixed amount. Mr. Ronald Daniels suggested that no definite amount on reclamation be required at this time, but that during the life of the mine, a series of previously set objectives be examined to see if they are being fulfilled. It was suggested that an annual report be made on revegetation and related reclamation efforts which have been performed during the year. The report would be reviewed at the end of each year.

CAUSE NO. 160-7

~~Mr. Thomas Kidd, Attorney at Law representing Champlin Petroleum, requested some changes in the Order for flaring or venting in the Pineview~~

UTAH COPPER DIVISION

MINING AND RECLAMATION PLAN

1. Mine Area

During Operations

1. Maintain stable side slopes generally averaging between 25° to 29° from horizontal. *No Cost assignable to reclamation

After Conclusion or When No Longer Needed

1. Leave side slopes in stable condition between 32° to 37° from horizontal.
* \$100,000.00 per year.
2. Provide means of safe disposition for pit drainage water.
3. Raze or remove surface facilities.

2. Mine Waste Disposal Area * presently monitoring dumps for stability at \$6,000.00

During Operations

1. Monitor dumps for stability.
2. Test vegetation possibilities. 10 K
3. Maintain dikes and ponds.

After Conclusion or When No Longer Needed.

1. Stabilize dumps by terracing and hydraulic methods. *Ultimate Removal \$100,000.00
2. Raze or remove surface facilities. *\$500,000.00

3. Excess Mine Water Disposal Area

During Operations

1. Maintain dikes for safe containment of excess mine water.
2. Test vegetation methods. 3K

After Conclusion or When No Longer Needed

1. Remove or cover accumulated slats, treat with neutralizers, grade and vegetate as required. *\$100,000.00

4. Ore Transfer - Mine to Process Area

During Operations

No specific work contemplated.

After Conclusion or When No Longer Needed

1. Remove surface facilities.

5. Ore Processing Facilities Area

During Operations

No specific work contemplated.

After Conclusion or When No Longer Needed

1. Raze or remove surface facilities. *\$500,000
2. Eliminate hazardous conditions. *\$100,000
3. Stabilize and revegetate as required. *\$100,000

6. Tailing Disposal Area

During Operations

1. Stabilize dike by maintaining 5 to 1 slope and conducting periodic inspections by consultants. 1K
2. Stabilize dike top surface and roads with stabilizing agent such as Coherex.
3. Stabilize dike outer surface with vegetation. 10K
4. Stabilize surface of pond by wetting from peripheral line, application of agents by land vehicles or airplane.
5. Test vegetation methods on surface of pond. *\$1,000.00

After Conclusion or When No Longer Needed

1. Complete necessary dike stabilization. *\$200,000.00
2. Vegetate pond surface if determined practicable.

7. Excess Process Water Disposal Area

During Operations

1. Maintain dikes for safe containment of excess process water

After Conclusion or When No Longer Needed

1. Raze or remove surface facilities. *\$100,000.00
2. Leave sludge ponds, evaporation ponds and other disturbed areas in condition suitable for other use determined at conclusion. *\$500,000.00